There is a doctrinal void of any technique or process that helps a commander ensure that his vision of how to achieve a decision and accomplish his mission is synchronized with his higher commander's campaign or operation plan and in communicating this vision to his subordinates. Operational design fills this void by providing a process for the commander to use that facilitates the nesting of campaign and operation plans and provides a blueprint for his subordinate commanders and staffs to follow in developing his plan.

Commanders initiate the conduct of operations with a design that will guide their subordinate commanders and the staff in planning, execution, and assessment. This operational design is the commander's tool for translating the operational requirements of his superiors into the tactical guidance needed by his subordinate commanders and his staff. The commander uses his operational design to *visualize*, *describe*, and *direct* those actions necessary to achieve his desired end state and accomplish his assigned mission. It includes the purpose of the operation, what the commander wants to accomplish, and how he envisions achieving a decision. Visualization of the battlespace and the intended actions of both the enemy and the friendly force is a continuous process that requires the commander to understand the current situation, broadly define his desired future situation, and determine the necessary actions to bring about the desired end state. The commander then articulates this visualization to his subordinate commanders and staff through his commander's battlespace area evaluation (CBAE) and guidance. By describing his visualization in this concise and compelling method, the commander focuses the planning and execution of his subordinate commanders and staffs. Finally, the commander directs the conduct of operations by issuing orders, assigning missions and priorities, making decisions, and adjusting his planned actions as necessary based on assessment.

Operational design differs at various levels of command, principally in the scope and scale of operations. Higher level commanders, such as the component and MAGTF commander, identify the time, space, resources available, and purpose of operations that support the joint force commander's campaign plan or component commander's operational design. At a lower level of command, the commander may be able to include in his operational design a detailed description of the battlespace, objectives, available forces and desired task organization, and guidance on the phasing of the operation.

Operational design helps the commander to visualize the operation and describe that vision to his subordinate commanders and the staff. See Figure 1. The elements of operational design include—

- Factors of mission, enemy, terrain and weather, troops and support available-time available (METT-T).
- CBAE consisting of the commander's analysis of the battlespace, commander's intent, center of gravity analysis, and commander's critical information requirements.
- Commander's guidance.
- Decisive actions.
- Shaping actions.
- Sustainment.
- Principles of war and tactical fundamentals.
- Battlefield framework.
- Operation plan or order.

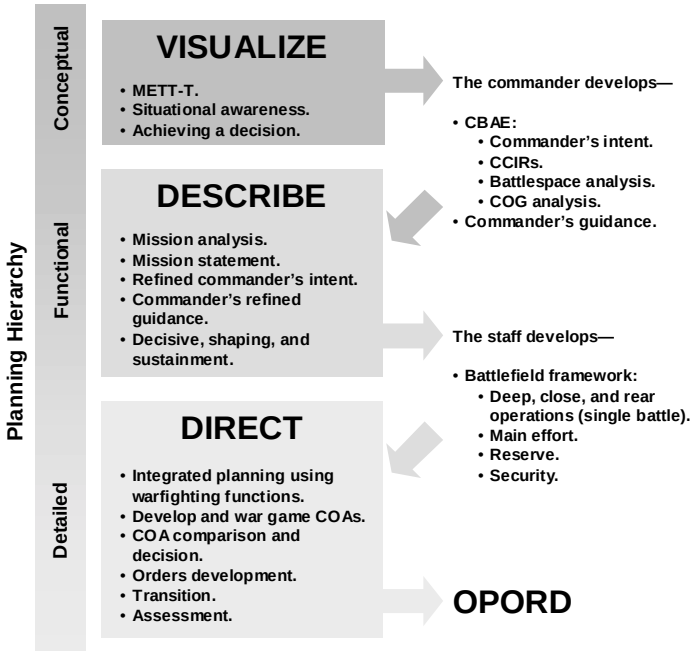


Figure 1.

Visualize

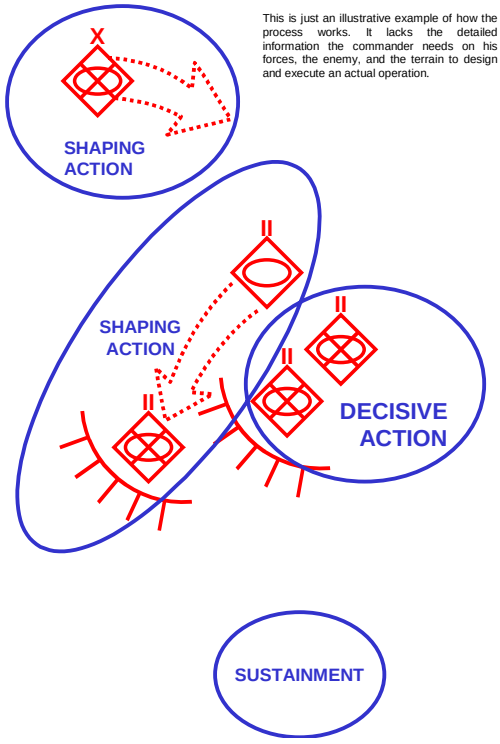
The *visualize* portion of operational design is what MCDP 5, *Planning*, refers to as conceptual planning, the highest level of planning. In conceptual planning, the commander determines the aims and objectives of the operation. During visualization, the first task for the commander is to understand the situation. He studies the situation to develop a clear picture of what is happening, how it got that way, and how it might further develop. The commander considers the information available on the factors of METT-T and any other information on the situation or potential taskings from higher headquarters. He develops an initial view of friendly actions, desired effects and their results, and determines the means to achieve those results. Part of the commander's thinking should also include assuming the role of the enemy, considering what the enemy's best course of action may be, and deciding how to defeat it. Thinking through these factors helps the commander develop increased situational awareness. The commander must also address possible outcomes and the new situations that will result from those possibilities. As the situation changes, so will the solution and the actions that derive from it. Combining this initial understanding of the situation within the battlespace with his experience and military judgment, he may begin his visualization by posing the following questions—

Where am I? Where is the enemy?
Where are my friends? Where are the enemy's friends?
What are my strengths? What are the enemy's strengths?
What must I protect? What are the enemy's weaknesses?
What must I do and why? What will the enemy do and why?
What is the enemy's most dangerous course of action (COA)?

As the commander considers these questions, he visualizes what he thinks he has to accomplish to achieve a decision and best support his higher commander's operation. This becomes the basis for his CBAE and guidance which he provides to his subordinate commanders and the planners in the describe portion of operational design.

Describe

The *describe* portion of operational design is a combination of conceptual planning and what MCDP 5 refers to as functional planning, the middle level of planning in which the commander and the staff consider discrete functional activities that form the basis for all subsequent planning. It begins when the commander articulates his vision through his CBAE and initial guidance. The commander then uses this visualization to focus and guide the staff as they conduct mission analysis to determine the mission of the force. Mission analysis provides the commander and his staff with additional insight on the situation. Combined with any intelligence or operational updates, mission analysis may prompt the commander to refine his vision, confirming or modifying his commander's intent or other initial guidance on decisive and shaping actions and sustainment. See Figure 2.

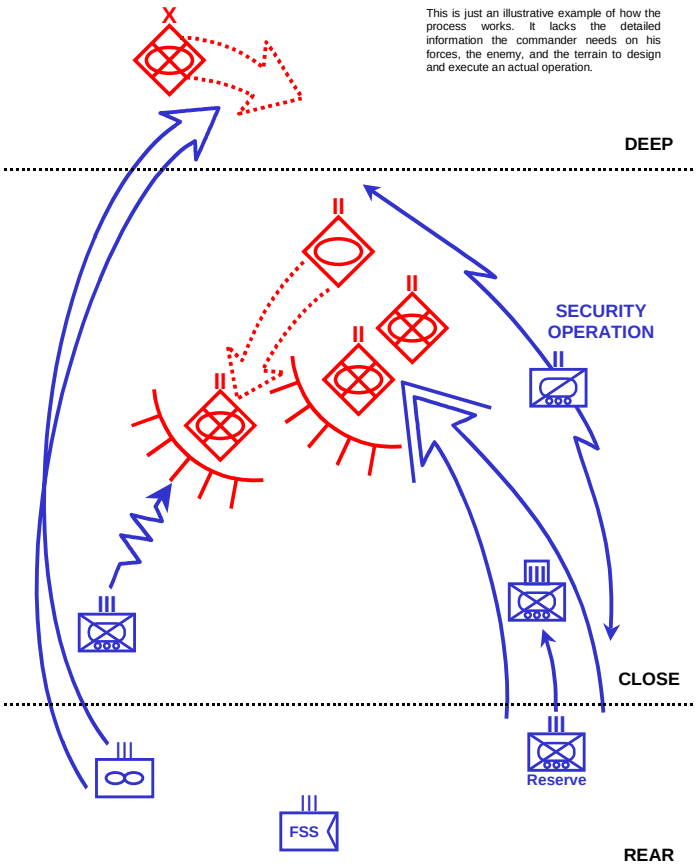


"The purpose of this operation is to defeat the enemy's first tactical echelon. I see the enemy's tactical strength as his mobile reserves. I cannot let the enemy commit these reserves in a decisive manner. To support the higher commander's plan, I will have to keep the reserve mechanized brigade from committing against our higher commander's main effort or being used decisively against my forces. I want to shape the enemy by having him first commit his reserve armor battalion against my secondary effort. Simultaneously, by using lethal and non-lethal fires, I want to control the timeline for the commitment of the enemy's reserve mechanized brigade and, once committed against my forces, I want to limit its capability. These shaping actions will allow me to fix the enemy reserves while I mass my combat power at the time and place of my choosing. I want to exploit my tactical center of gravity, my superior tactical mobility, and combined arms. I want to avoid the enemy's fixed defenses and focus my decisive action against the enemy's flank to defeat the two isolated mechanized battalions. Once defeated, I want to rapidly focus on the defeat of his remaining mechanized and reserve units that were fixed by my supporting effort. I want a viable security force covering the flank of my main effort. My sustainment must be task organized and positioned forward to allow the force to maintain operational momentum."

Figure 2.

Once the mission statement has been produced, the commander and staff are ready to further develop the operational design by describing how the command will achieve a decision through decisive and shaping actions. They also describe how these actions will be sustained. Receiving necessary commander's planning guidance, the staff begins to develop the *battlefield framework.* See Figure 3. This framework describes how the commander will organize his battlespace and his forces to achieve a decision. The battlefield framework

consists of the battlespace organization of envisioned deep, close, and rear tactical operations as well as the organization of the force into the main effort, reserve, and security. Supporting efforts are addressed in the context of deep, close, and rear operations as part of the single battle.



On order the division attacks in zone to defeat the first echelon. **Close Operations—**In the west a mechanized regiment conducts a supporting attack to fix the forward mechanized battalion and cause the commitment of the enemy reserve armor battalion. To support this attack our deception effort will focus on portraying this supporting attack as our main effort. Upon the commitment of the enemy reserve, our ***main effort***, consisting of a mechanized regimental task force, conducts a flank attack through the gap between the two defending mechanized infantry battalions and defeats the enemy armor battalion. Fires will disrupt any movement of the two mechanized enemy battalions and the enemy divisions command and control. The ***reserve*** is a mechanized regiment that follows the main effort and is prepared to defeat a flank counterattack from either enemy mechanized infantry battalion. If not committed against the two mechanized battalions, it will be prepared to block the enemy reserve mechanized brigade. **Deep Operations—**The MAG limits the reserve mechanized infantry brigade from reinforcing the first echelon. **Rear Operations—**A mobile CSSD is prepared to follow the main effort and conduct refuel on the move to maintain operational momentum. **Security—**A LAR battalion screens the main effort's eastern flank.

Figure 3.

Direct

The *direct* portion of operational design is a combination of functional planning and what MCDP 5 refers to as detailed planning, the lowest level of planning. During direction the commander and the staff determine the specifics of implementing the operational design through the operation plan or order. Armed with the description of how the commander intends to achieve a decision and obtain his desired end state, planners conduct integrated planning using the battlefield framework and the six warfighting functions to develop and war game COAs that address the following considerations and issues—

- Type of operation.
- Forms of maneuver.
- Phasing/sequencing of the operation.
- Security operations.
- Sustaining the operation.
- Information operations.
- Targeting priorities.
- Intelligence collection priorities.

As this integrated planning continues, the commander chooses a COA and, if time and situation allow, the staff conducts detailed planning to provide further direction to the force and prepare necessary operations plans and orders. Once the plan or order is completed, the direct portion of operational design concludes with the transition of the plan or order to the subordinate commander's and the staff that will execute it. The operational design, once developed into an operation plan or order, is the basis for execution and aids the commander and the staff as they execute operations.

The commander assesses the success of the operation by comparing the envisioned operational design—as expressed in the operation order—with what is actually occurring in the battlespace. If the assessment indicates the need to modify or adjust the operational design the commander will again visualize what must be done and then he and the staff will describe how it will be accomplished by modifying or adjusting the battlefield framework. Fragmentary orders, branch plans, or sequels to direct the operation will be prepared and issued, if necessary.